

Nuclear Systems Technician Curriculum Redevelopment Project at Midlands Technical College

Executive Summary

Midlands Technical College (MTC) proposes “The Nuclear Systems Technician Curriculum Redevelopment Project.” Dr. Thomas C. (Clint) Chandler, MTC Engineering Technology Department Chair, will serve as the principal investigator, assisted by two mechanical engineering faculty members. Dr. Chandler has facilitated collaboration between the South Carolina Electric & Gas Company (SCE&G) and college leadership for the approval and implementation of a nuclear program that provides a comprehensive foundation in seven courses targeting nuclear engineering, health physics, materials and mechanical engineering, electrical engineering, and safeguards and security. SCE&G members serving on the program Advisory Panel have 40 years of nuclear training between them. They are providing expertise and a rich legacy of proprietary training materials built on 30 years of safe and reliable operations of nuclear facilities. The project will support redevelopment of these training materials into non-proprietary college courses and related assessments. MTC is helping form a new subcommittee of the Carolina Nuclear Cluster to support collaboration among technical colleges in South Carolina and has formalized a curriculum sharing agreement with Florence-Darlington Technical College, the only other college in the state planning a similar program. These collaborative efforts will strengthen MTC’s program, build expertise among faculty in the discipline, increase efficiencies between programs, and further the efforts of the Nuclear Energy Institute to build uniform curriculum across technical college programs. Once the curricula is redeveloped and can be shared, it is MTC’s goal that the program will serve as a model for training nuclear technicians and effectively address critical workforce development issues on behalf of the industry.

Principal Investigator: Thomas C. (Clint) Chandler, chandlerc@midlandstech.edu